DOCUMENT RESUME

ED 073 538 EA 004 893

AUTHOR Lassiter, Frank
TITLE Equipment and Furniture Guidelines for Open-Plan Middle and High Schools.
PUB DATE Sep 72
NOTE 11p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Classroom Furniture; *Educational Equipment; *Facility Guidelines; *Flexible Classrooms; High Schools; Middle Schools; Open Education; *Open Plan Schools; Purchasing

ABSTRACT

The flexibility of open-plan space and the goals of an open education have implications for the development of furniture and equipment lists. A suggested furniture and equipment list that has been developed for one team group in one academic cluster in an academic area is presented. The selections aim at providing a wide variety of working surfaces and seating arrangements. Movable equipment needs are subdivided into work surfaces, seating, storage, display, chalkboard (tack board), and movable partitions (area screens). A related document is EA 004 894. (Author/MLF)

FILMED FROM BEST AVAILABLE COPY

Sept 1972

ED 073538

EQUIPMENT AND FURNITURE GUIDELINES FOR OPEN-PLAN MIDDLE AND HIGH SCHOOLS

by
Frank Lassiter
Special Consultant
Educational Facilities Center
Chicago, Illinois

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

The flexibility of open-plan space and the goals of an open education have enormous implications for the development of furniture and equipment lists.

Implications for Furniture and Equipment

1. A different approach -- Open Ended
2. Non-regimentation in furniture arrangements
3. Availability in a variety of sizes and heights -- or adjustable in height
4. Easily moved -- light-weight
5. Multi-purpose and, when possible, components should be interchangeable/modular
6. Availability in a variety of textures, colors -- imaginative, stimulating
7. Able to accommodate a variety of student/teacher uses:
   - as a -- work surface
   - for -- storage
   - to -- support educational equipment
   - to -- create easily changed boundaries
8. Able to accommodate a variety of student postures:
   - -- lying
   - -- sitting

EA 003 893

-- kneeling

-- standing

9. Technological devices should be carefully chosen bearing in mind their use in combination with faculty guidance -- taking maximum account of individual student needs, interests, learning speeds and styles.

10. Care must be given to placement of equipment distribution points and means of distribution

11. Multi-media capabilities may be required in every area of the school.

The following suggested furniture and equipment list has been developed for one team group in one academic cluster in an academic area. The equipment mentioned is all to be mobile. As much of it as possible should be modular and easily interchangeable. Work surfaces should be provided with an easily cleaned plastic surface. Tables and chairs should be provided in a variety of heights or easily be adjusted to accommodate the varying physical types found in a middle school mix. Stacking chairs should be considered to facilitate movement of a quantity of chairs from one position in the area to another, or from one cluster area to another.

The aim has been to provide a wide variety of working surfaces and seating arrangements. Students and teachers or teacher's aides will be working in groups of 50, 25, 10, 5, one-to-one, and individually. To provide for these limitless possibilities,

while at the same time avoiding a fantastic clutter of chair legs, table legs, and people legs, conventional chair-desk facilities have not been suggested for every student.

Pursuit of individualization of education and independent study will result in a great mix of activities. Seminars will take place in lounge furniture groupings, at groupings of the versatile folding platforms suggested, as well as in open forums and partially enclosed areas formed by mobile panels. Large groups or conventional class-size groups should be easily formed at will.

It is suggested that the monies set aside for equipment be budgeted over the first year or so of operation. The initial purchases suggested here, and understood to be minimal, would be evaluated as to quantities, quality, and function by the staff. Additions or changes would be made in terms of what the staff needs to implement the program.

(Not included in the list -- audiovisual equipment, built-in furniture, lockers, supplies and materials, or such items as drinking fountains, etc.)

On the assumption that approximately 30 percent of the pupils will be in specialized areas -- physical education, art, music, homemaking, industrial arts, theater, library-resource areas, community, satellite project areas, and so forth -- a single, interdisciplinary academic area would have to have furniture to accommodate approximately 70 percent of the students at a variety of learning stations at one time.

Flexible Teaching Area

Movable equipment needs can be subdivided into basic categories:

A. Work surfaces --

Seated height (includes tables, study carrels, work counters, etc.)

Standing height

Informal

B. Seating --

Standard

Informal

Specialized

C. Storage --

Student

Staff

Materials and supplies

Resource

Project

D. Display

E. Chalkboard -- tackboard

F. Movable Partitions -- (Area Screens)

Specific Recommendations (Types of equipment for open spaces)

A. Work surfaces --

1. Seated height:

(a) Trapezoid tables, plastic surface, 30"x30"x30"x60", adjustable height. Capable of accepting tote trays on tray support runners or in wire baskets attached to work surface. It is suggested that a large

percentage of the seated-height work surfaces required be of trapezoid-shape tables. These tables used singly will provide work surfaces for one or two students and when grouped provide a variety of shapes and sizes serving small groups working on large projects, large groups in seminar, discussion, or forum situations, or as movable, continuous counter surfaces.

(b) Study Carrels, plastic work surface, desk top approximately 23" deep x 36" wide x varying heights. Provide full-width shelf, consider under-shelf light and multi-outlet boxes for most. Suggest single units rather than clusters or ganging of carrels because separate units provide greater flexibility of placement.

(c) Activity carrels, plastic work surface, desk top approximately 23" deep x 48" wide x varying heights. Provide full-width shelf, consider under-shelf light and multi-outlet boxes. Investigate special units available that accommodate rear view projection equipment. Suggest single units for same reason as above. These units when provided with shelf light and electrical outlets permit use of larger auto-tutorial accessories or may be used for individualized activities requiring more space than an ordinary carrel, such as art, two-student activities or projects requiring many materials.

2. Standing height: (or for use with stool with adjustable back rest)

(a) Oblong tables, plastic surface, approximately 48" wide x 24" deep x 36" high. To form continuous work counter of varying lengths. Counter units should provide room for movable storage cabinets below. Cabinets should be provided with casters suitable for carpeted surfaces and locking brakes.

(b) Adjustable drawing boards -- These are suitable work surfaces for many activities besides drawing.

3. Informal:

(a) Floor -- with use of tote trays with writing surface, lap boards, and so forth.

(b) Platforms -- approximately 4' x 4' x 8" high, 16" high and 24" high. Carpeted surface and/or smooth surface. Either provided with lockable casters suitable for carpeted surface or "ski" runners for sliding over carpet. Top could be hinged or removable to permit interior to be used for storage. Alternate would be platforms with folding legs that could be stacked for storage.

B. Seating --

1. Standard --

A variety of heights or adjustable in height. Stacking feature should be considered; some could be provided with removable tablet-arm feature.

2. Informal --

(a) Floor cushions (consider several varieties and shapes.)

(b) Sofa - 3 seater

(c) Lounge chairs

3. Specialized --

Stools with adjustable backrest

C. Storage --

1. Student

(a) Coat and hat -- could be mobile units or wall hung. If traditional lockers are used, easily accessible, central location is essential. If mobile, 47" wide x 23" deep x 68" high, double-faced -- accommodating approximately 30 students each.

(b) Tote Tray/Personal Storage-Specialized Cabinets

Each cabinet accommodating approximately 30 tote trays. Cabinet 47" wide x 23" deep x 68" high, double door. There are tote trays available that come with a hinged lid to be used as a writing surface and that are provided with a handle and are used much like a brief-case. Provide binet with locking wheels.

2. Materials and Supplies/Resource/Project

(a) Mobile storage cases, approximately 68" in height with modular capacity to accept a variety of drawer sizes, adjustable shelves, or special-purpose trays.

A double-door unit 47" wide x 23" deep x 68" high might be equipped in the following manner: two full-width shelves placed 30" apart, 4 half-width drawers 6" high, and 4 half-width drawers 9" high, as one example of possible choice of interiors.

(b) Mobile storage cases, approximately 42" wide x 23" deep x 30" high (to fit beneath standing-height counter/tables) with a variety of drawer depths (perhaps 3 - 6" high and and one 9" high, or paper storage drawers 3" high, or cupboard with shelves. Provide cases with locking wheels.

3. Resource

Book carts or mobile open shelving - 52" long x 24" wide x 42" high - wheels - 4 shelves or cutouts to accommodate tote trays, shelves adjustable in height.

D. Display --

Use of area screens, backs of mobile storage units, and available wall surfaces as tackboard and gallery exhibition surfaces is suggested.

If need for additional special-purpose display units, such as glass-front cases, becomes obvious, these items can be earmarked for future purchase.

E. Chalkboard and Tackboard --

Available wall surfaces, area screens, and backs of mobile storage units are suggested for this purpose. In addition: Mobile chalkboard/projection screen/ tackboard units.

F. Movable Partitions -- (Area Screens)

An assortment of single-unit -- free-standing panels, either on wheels with locking brakes or on metal skids. These partitions should be joinable in groups of three or more. The panels should be of the type which accommodate tackboard or chalkboard surfaces and from which equipment can be hung if desired (shelves, display cabinets, worksurfaces, and storage units).

(a) Freestanding, curved partition, 60" wide x 54" high with surface suitable for attaching acoustical panels or drawing paper to create panoramas, cycloramas.

(b) Freestanding mobile panel, 48" wide x 54" high with mirror on one side/tackboard on other -- or a frame capable of accepting either mirror, tackboard, or chalkboard by applying hanging panels.

(c) Joinable panels to temporarily enclose a seminar group or project area, each panel approximately 48" wide by 54" high.

G. Special Purpose --

(a) Mobile display easel, 36" x 18" x 50" -- with removable display boards (tackboard, chalkboard, felt surfaces).

(b) Mobile bin, 24" x 20" x 22" high, open top

(c) Mobile tool counter -- tool board above, drawers below, 50" x 18" x 48" overall height.

* Future purchase

* (d) Sewing machine with cabinet -- even if separate home arts area is provided.

* (e) Craft or art bench -- suitable for hammering, edge-grain maple - with casters, vise, storage below, 60" x 30" x 35" high.

* (f) Mobile planter, 36"x 18" x 12"

* (g) Quiet module (sound-proof unit, portable)

(h) Chair carts (if stacking chairs are provided)

(i) Mobile lecturn capable of accepting lockable tote tray below (teacher lecture station)

Faculty Planning Centers

1. Trapezoid tables, approximately 30" x 30" x 30" x 60", capable of accepting tote trays on tray support runners or in wire basket attached to table.
2. Adjustable posture chair with upholstered seat and back.
3. Side chair, upholstered seat and back
4. Side files -- (or files to fit beneath tables)
5. Adjustable shelving
6. Coat rack with hat shelf above, boot rack below
7. Cabinet accepting 6 large, lockable tote box drawers.

Science Areas

The greatest flexibility will be achieved through use of quick-connect-service islands with water, waste, and electric power connections. Student science tables used in connection with these units would be provided with acid resistant tops and tray support runners or tray shelf beneath top capable of accepting tote trays. Tote tray storage cabinets should be provided along with mobile service carts. Science storage areas should be equipped with adjustable shelving, floor to ceiling, to accommodate glassware, apparatus, and supplies. Chemicals must be stored in a separate area. A double sink with pegboard above is required in each science preparation area.

Library Resource Area

A separate report dealing with appropriate furniture and equipment, including audiovisual devices, is in preparation and will be available soon.